

CLAIMS

1. An integrated logistics system for managing the shipments of goods supplied from a plurality of different shippers by a plurality of carriers, said system comprising:

a purchasing module evaluating proposals by shippers for respective shipments of goods and awarding contracts for the shipments to the plurality of carriers;

an optimization module analyzing the proposals and informing the purchasing module if an opportunity exists for at least some of the shipments to be consolidated, in which case at least one contract awarded by the purchasing module is for a consolidated group of the shipments;

a contract administration module maintaining information relating to the status of proposals received and contracts awarded by the purchasing module;

a scheduling module scheduling shipments according to the awarded contracts;

a shipment management module tracking the status of shipments awarded by the purchasing module and scheduled by said scheduling module; and

a financial module authorizing payments according to the status of shipments tracked by the shipment management module.

2. An integrated logistics system according to claim 1, wherein the plurality of carriers includes ship owners and the logistics system includes a tanker planning module.

3. An integrated logistics system according to claim 2, wherein the tanker planning module includes a partitioned relational database storing collaborative data relating to shippers, freight forwarders and ship owners.

4. An integrated logistics system according to claim 3, wherein access to each partition in the relational database is selectively controlled and managed so that contracts between shippers and ship owners can be awarded by the purchasing module without revealing the confidential information of one party to the other.

5. An integrated logistics system according to claim 1, further comprising a data warehouse module storing operations data received from the shipment management module and commercial data received from the financial module.

6. An integrated logistics system according to claim 5, wherein the data warehouse module selects, filters, aggregates and repackages said operations data and commercial data to generate data mining, metrics and predetermined reports, and customizable reports.

7. An integrated logistics system according to claim 6, wherein the data warehouse module includes a front end interface offering secured access and controlled transfer between the data warehouse module in computer readable format.

8. An integrated logistics system according to claim 1, further comprising a carrier

management module which tracks the performance of carriers and generates ratings of the carriers.

9. An integrated logistics system according to claim 8, wherein the carrier management module receives information from the front end interface of a data warehouse module.

10. An integrated logistics system according to claim 8, wherein the carrier management module receives metric requirements from the contract administration module.

11. An integrated logistics system according to claim 8, wherein the carrier management module receives exception information indicating shipment problems from an exception queue in the shipment management module.

12. An integrated logistics system according to claim 1, further comprising a regulatory module collecting information from other modules of the system and providing reports related to health and safety or governmental regulations.

13. An integrated logistics system according to claim 12, wherein the purchasing module blocks an award of a shipment to a carrier according to information maintained in the regulatory module.

14. An integrated logistics system according to claim 12, wherein the regulatory module accesses the MSDS and TSR information maintained in the Enterprise Resource Planning software

of a shipper.

15. An integrated logistics system according to claim 1, wherein the shipment management module includes a relational database logging and storing all of the shipment records of the shipments awarded by the purchasing module and scheduled by said scheduling module.

16. An integrated logistics system according to claim 15, wherein the shipment management module includes a data management tool managing the viewing and/or updates of the data in the relational database in a secure change environment.

17. An integrated logistics system according to claim 15, wherein the relational database in the shipment management module receives information from the shipper and carrier for each shipment, the contract administration module, and the scheduling module.

18. An integrated logistics system according to claim 15, wherein the shipment management module receives or computes position data to audit and/or calculate current information on detention and to validate charges for detention.

19. An integrated logistics system according to claim 15, wherein the shipment management module computes inventory data to calculate the position and amount of inventory in the shipments tracked by the shipment management module.

20. An integrated logistics system according to claim 15, wherein the shipment management module provides information on the location and status of equipment of a given shipper or carrier.

21. An integrated logistics system according to claim 15, wherein the shipment management module includes an audit system allowing changes to shipment records in the relational database to be controlled and tracked per audit protocols and viewing of this history and changes made to/during a shipment.

22. An integrated logistics system according to claim 15, wherein the shipment management module forwards an electronic authorization for payments to the financial module according to the shipments records in the relational database.

23. An integrated logistics system according to claim 1, wherein the contract administration module permits minor changes to a contract awarded by the purchasing module by coordinating change requests and change response messages between the shipper and the carrier.

24. An integrated logistics system according to claim 1, wherein the scheduling module receives electronic data from a shipper for a shipment and forwards said data to the corresponding carrier via a distributed communications network and XML.

25. An integrated logistics system according to claim 24, wherein the scheduling module

matches and synchronizes the timing of notification, booking or offer of the shipment with the carrier and automatically notifies the shipper that the shipment has been confirmed.

26. A method of arranging for the shipment of goods by one of a plurality of carriers, said method comprising:

maintaining carrier information relating to each one of said plurality of carriers in a centralized logistics system;

receiving a proposal for the shipment of goods supplied from a shipper, said proposal including shipping information relating to the shipment of the goods and transaction information relating to the contract terms for the shipment;

evaluating the proposal to select a carrier from among said plurality of carriers; and

creating an electronic abstract of a contract between the shipper and the selected carrier for the shipment of goods identified in the proposal.

27. A method of arranging for the shipment of goods as recited in claim 26, further comprising creating an electronic abstract of the response received from the selected carrier and confirming selection of the selected carrier with the shipper using the electronic abstract of the response.

28. A method of arranging for the shipment of goods as recited in claim 26, wherein the carrier information includes qualification information for each one of the plurality of carriers.

29. A method of arranging for the shipment of goods as recited in claim 28, wherein the qualification information indicates the ability of the plurality of carriers to ship different categories of goods.

30. A method of arranging for the shipment of goods as recited in claim 29, wherein the different categories of goods include chemicals.

31. A method of arranging for the shipment of goods as recited in claim 26, further comprising sending an electronic abstract of the proposal to the potential carriers;

evaluating responses to the electronic abstract received from the potential carriers, said responses including shipping information supplied by the carrier relating to the shipment of the goods or transaction information relating to the contract terms for the shipment;

selecting one of the potential carriers for the on the basis of the responses to the electronic abstract and the carrier information maintained in said centralized logistics system;

32. A method of arranging for the shipment of goods from an origin to a destination, said method comprising:

retrieving routing information for a plurality of different transport modes;

retrieving carrier information relating to each one of a plurality of different carriers for each one of said plurality of different transport modes;

determining a routing for the shipment of goods from said origin to said destination based on said retrieved routing information; and

scheduling the shipment of goods from said origin to said destination based on said carrier information.

33. A method according to claim 31, wherein the scheduled shipment of goods from said origin to said destination is scheduled to use at least two different transport modes.

34. A method according to claim 32, wherein the scheduled shipment of goods is arranged using a third party logistics system.

35. A method according to claim 31, wherein one of said plurality of different transport modes comprises truck transport.

36. A method according to claim 34, wherein said carrier information includes information relating to bulk truck carriers, truckload carriers, and less than truckload carriers.

37. A method according to claim 34, wherein said shipment is scheduled using information unique to truck transport.

38. A method according to claim 31, wherein one of said plurality of different transport modes comprises rail transport.

39. A method according to claim 37, wherein said shipment is scheduled using



information which is unique to rail transport.

40. A method according to claim 31, wherein one of said plurality of different transport modes comprises containership transport

41. A method according to claim 39, wherein said shipment is scheduled using information which is unique to containership transport.

42. A method according to claim 31, wherein one of said plurality of different transport modes comprises bulk tanker transport.

43. A method according to claim 41, wherein said shipment is scheduled using information which is unique to bulk tanker transport.

44. A method according to claim 31, wherein one of said plurality of different transport modes comprises air freight.

45. A method according to claim 44, wherein said shipment is scheduled using information which is unique to air freight.